UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,127	01/08/2002	Matt Richard Hogstrom	RSW920010133US1	4519

7590   06/13/2005

A. Bruce Clay
IBM Corporation T81/503
PO Box 12195
Research Triangle Park, NC 27709

EXAMINER
RAMPURIA, SATISH

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 January 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Amendment

1.   This action is in response to the amendment received on 01/26/2005.

2.   The rejection under 35 U.S.C. §101 to claims 1-10 is withdrawn in view of applicant's

amendment.

3.   Claims amended by the applicant: 1 and 8.

4.   Claims pending in the application: 1-22.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No.

6,701,520 to Santosuosso et al. (hereinafter called Santosuosso).

Per claim 1:

Santosuosso disclose:

-      loading a class (FIG. 3, element 220 and related discussion);

- inserting an immutability flag into the class (col. 5, lines 37-40 "Immutable or constant

    objects are objects whose internal value can be set only at creation time and a static class

    variable is one in which only one copy exists for all objects of that class");

- determining whether the class is immutable (col. 5, lines 33-34 "Java compiler identifies

    any immutable objects"); and

- setting the immutability flag if the class is immutable (col. 5, lines 33-36 "Java compiler

    identifies any immutable objects... and changes or "elevates" them to equivalent static

    class variables").

Per claim 2:

The rejection of claim 1 is incorporated, and further, Santosuosso disclose:

- parsing the bytecode of the class (FIG. 3, Java compiler).

Per claim 3:

The rejection of claim 2 is incorporated, and further, Santosuosso disclose:

- determining whether the class can be modified after it is created (col. 5, lines 42-45

    "compiler determines that the values of the variables cannot be modified at run-time").

Per claim 4:

The rejection of claim 3 is incorporated, and further, Santosuosso disclose:

- whether the class can be modified comprises determining whether all properties of the

    object are marked private (col. 5, lines 1-10).

Per claim 5:

The rejection of claim 3 is incorporated, and further, Santosuosso disclose:

- whether the class can be modified comprises determining whether there are any non-

  private methods that update properties of the class (col. 5, lines 25-31).

Per claim 6:

The rejection of claim 1 is incorporated, and further, Santosuosso disclose:

- examining an argument in the request (see FIG. 3 and related discussion);

- if the argument is an object, determining whether the object is immutable (col. 5, lines

  33-34 "Java compiler identifies any immutable objects); and

- if the object is immutable, passing a reference to the object rather than a clone of the

  object (col. 5, lines 10-15 "…object goes out of scope… means that the object is not

  referenced in a stack… no other object references the object…").

Although, Santosuosso teach provide removing the immutable objects during the compile

time. Santosuosso is silent on receiving a request to invoke a server application. However, this

feature deemed to be inherent to the Santosuosso system, Santosuosso system shows immutable

objects are removed during the compile time which is done on any number of network

connection to other computers, col. 4, lines 21-30. Santosuosso system would in inoperative if

the request not received to invoke the server application.

Per claim 7:

The rejection of claim 6 is incorporated, and further, Santosuosso disclose:

- determining whether an immutability flag for the object is set (col. 5, lines 33-34 "Java

    compiler identifies any immutable objects").

Per claims 8 and 10:

The rejection of claim 6 is incorporated, and further, Santosuosso disclose:

- examining an argument in the request (see FIG. 3 and related discussion);

- if the argument is an object, determining whether the object is immutable (col. 5, lines

    33-34 "Java compiler identifies any immutable objects); and

- if the object is immutable, passing a reference to the object rather than a clone of the

    object (col. 5, lines 10-15 "...object goes out of scope... means that the object is not

    referenced in a stack... no other object references the object...").

Although, Santosuosso teach provide removing the immutable objects during the compile

time. Santosuosso is silent on receiving a request to invoke a server application. However, this

feature deemed to be inherent to the Santosuosso system, Santosuosso system shows immutable

objects are removed during the compile time which is done on any number of network

connection to other computers, col. 4, lines 21-30. Santosuosso system would in inoperative if

the request not received to invoke the server application.

Per claim 9:

The rejection of claim 8 is incorporated, and further, Santosuosso disclose:

- determining whether an immutability flag for the object is set (col. 5, lines 33-34 "Java compiler identifies any immutable objects").

Claims 11-17 are the apparatus claims corresponding to method claims 1-7 respectively, and rejected under the same rational set forth in connection with the rejection of claims 1-7 respectively, above.

Claims 18-20 are the apparatus claims corresponding to method claims 6, 7, and 10 respectively, and rejected under the same rational set forth in connection with the rejection of claims 6, 7, and 10 respectively, above.

Claims 21-22 are the computer product claims corresponding to method claims 1 and 6 respectively, and rejected under the same rational set forth in connection with the rejection of claims 1 and 6 respectively, above.

Response to Arguments

7.   Applicant's arguments with respect to claim 1, 8, 18, 21 and 22 has been considered but are moot in view of new ground(s) of rejection.
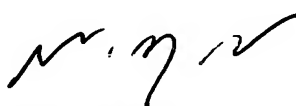
Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Satish S. Rampuria** whose telephone number is **(571) 272-3732**.

The examiner can normally be reached on **8:30 am to 5:00 pm** Monday to Friday except every

other Friday and federal holidays. Any inquiry of a general nature or relating to the status of this

application should be directed to the **TC 2100 Group receptionist: 571-272-2100**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Tuan Q. Dam** can be reached on **(571) 272-3695**. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria
Patent Examiner
Art Unit **2191**
06/13/2005

WEI Y. ZHEN
PRIMARY EXAMINER